

## CLAIMS

What is claimed is:

1. A method for improving pitch determination comprising:  
obtaining an input voiced speech signal;  
5 allocating said input voiced speech signal into a plurality of windows of a fixed  
sample size for pitch lag determination;  
selecting a target window of said plurality of windows by sliding the window  
until a predefined condition is satisfied; and  
computing optimum pitch correlation between said the target window and the  
10 window at a distant pitch lag.
2. The method of claim 1, wherein said sliding is with respect to time.
3. The method of claim 2, wherein said sliding is an increment in said  
15 time.
4. The method of claim 2, wherein said sliding is a decrement in said time.
5. The method of claim 1, wherein said predefined condition is a maximum  
20 number of samples.
6. The method of claim 1, wherein said predefined condition occurs when  
energy of said signal in said target window is maximized.
- 25 7. A computer program product comprising:

a computer usable medium having computer readable program code embodied therein for improving pitch determination, said computer readable program code configured to cause a computer to:

obtain an input voiced speech signal;

5 allocate said input voiced speech signal into a plurality of windows of a fixed sample size for pitch lag determination;

select a target window of said plurality of windows by sliding the window until a predefined condition is satisfied; and

compute an optimum pitch correlation between said the target window and the  
10 window at a distant pitch lag.

8. The computer program product of claim 7, wherein said sliding is with respect to time.

15 9. The computer program product of claim 8, wherein said sliding is an increment in said time.

10. The computer program product of claim 8, wherein said sliding is a decrement in said time.

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11. The computer program product of claim 7, wherein said predefined condition is a maximum number of samples.

12. The computer program product of claim 7, wherein said predefined  
25 condition occurs when energy of said signal in said target window is maximized.